



# TECHNOLOGY AND LANGUAGE LEARNING: VOCATIONAL HIGH SCHOOL GRADUATE STUDENTS' PERSPECTIVES ON TOEIC TEST

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## Abstract

**Purpose of the study:** This study aims to investigate graduate vocational high school students' perspectives on the use of technology in language learning (e.g., iPad, Personal Data Assistant, computer tablet, and smartphone) for international language testing. Based on the test-takers' data from 2017-2018, the results of the TOEIC score showed continuous descending or unstable performances.

**Methodology:** It is mixed-method research as the design by involving twenty-five graduate students of vocational high schools situated in Surakarta city. The convenience sampling was taken to cope with the different English proficiency. Open-ended questions and questionnaires become the primary instruments applied to get comprehensive data from them.

**Main Findings:** The result of this study shows that a self-study and fun condition are achieved by using mobile learning technology to enhance TOEIC language learning. Conducive learning is created, as stated by 92% of graduate students, to project mobile learning to be able to facilitate them in learning TOEIC language proficiency test.

**Applications of this study:** These findings from this research bring benefits for the vocational high schools, both state and private, as the reference for a further policy of conducting the instructional process in TOEIC language proficiency test to gain projected score required by related workings industry especially in Surakarta city and Indonesia.

**Novelty/Originality of this study:** As most of the instructional process of TOEIC learning implemented by speech and teacher-centered in the class, the inclusion of technology brings new perspective and paradigm not only effective and efficient way of achieved passing grade score but also allow them to be independent, confident and gain more their problem-solving skill.

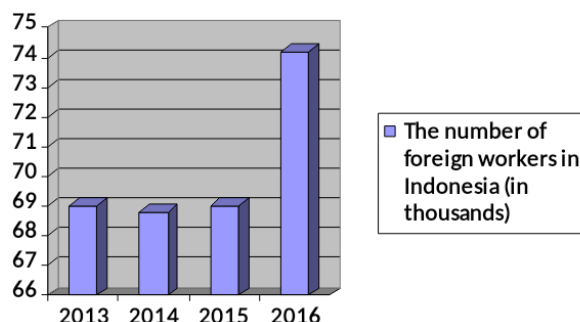
**Keywords:** *English Test, Technology, Vocational High School, Graduate Students, TOEIC, Perspective.*

## INTRODUCTION

In this globalization era, communication skill with English becomes a vital asset. In the field of career opportunities and developments, it is often found a total failure caused by the low of English skill as a smart person could not share his ideas, and great talents are not able to develop and uncompetitive enough to compete with them who have skilled ones. The passport for a better career, academic achievement, and life seems from competency and proficiency in the language (Rethinasamy & Kee, 2011). English becomes necessary to meet as the primary requirement in various fields. It is mostly used as academic lectures in four major disciplinary covering medical sciences, life, physical sciences, social studies, and art and humanities (Zare & Keivanloo-Shahrestanaki, 2017). Multi-level modeling assessment for English learners' (ELs) has significantly and inversely associated with performance on reading and writing ability (Miller, 2018). English is also able to become the bridge for intercultural blending within the topics into the practice of subjects matter (Gobel & Helmke, 2010). Professional language, especially in English, is applied by the purpose of publication in English-language journals (McDowell & Liardet, 2019). The gain of the prominence of English public speaking (EPS) has improved its popularity around the world (Zhang et al., 2020). Considering its crucial, the ministry of Education and culture of Republic Indonesia launched a program to certify graduate students to gain extra skilled in international standard of English language mastery. It is done to assist students in increasing their proficiency in the English language for communication. One of them is by giving the English language exam called Test of English for International Communication (TOEIC). It becomes semi-compulsory test for the graduate students to accelerate their foreign language communication skills. English becomes a lesson taught at the secondary level and tested in the national final examination. TOEIC test becomes a stepping stone as the initial requirement for the students to meet with the career field of various areas such as; tourism, manufactures, services, etc.

The demand for English mastery skills for the vocational high school graduate students is a must in this Asean Economic Community (AEC), where they will have a competition among the same level of education and or even higher from all over southeast Asia zone. The number of vocational high school graduate students has reached its high quantity, which is 500.000 graduates (Ministry of Education and Culture Indonesia, 2016). On the other hand, the low skilled performance of its graduates, it will be the main contributor to unemployment in Indonesia. They must have prime quality in the vocational area and its universal supporting factors, namely the ability to communicate in the International standard. Other ASEAN countries have promoted a program to accelerate the English skill for its citizen, including on the term of education. It is expected that they will become the layer of the economic defense for each country from the invasion of

foreign workers. Since the opening of AEC by the end of 2015, it has shown that there was a shift of the workers hired in the domestic area. The number of foreign workers from 2013- 2015 remained the same. In other words, less significant improvement within the quantity occurred. By the end of 2015, the situation changed dramatically as the rising of foreign workers at the same time of AEC opening in 2016 ([Ministry of Manpower and Transmigration, 2016](#)).



**Figure 1:** The number of foreign workers in Indonesia (in thousands)

To face reality above, related to the vocational high school revitalization in terms of technology, language learning, and TOEIC language test for international communication, needs to have serious attention to increasing the quality of English education in vocational high school by finding out the graduate students perspective. It is done to know what comes to the barrier and suitable solution for them to cope with the TOEIC test based on their real experience during the last three years at school. In today's globalized economy competition, English becomes an essential resource as an International competition ([Jeon, 2012](#)). It affects much on the nation's economy, which mostly relies on human resources and international business ([Choi, 2008](#)). English proficiency becomes the primary skill to gain educational success ([Choi, 2008](#); [Graddol, 2006](#)). The performance of an English proficiency test determines a crucial role in the social, future academic, financial, and professional success ([Cho, 2004](#); [Choi, 2008](#)). Test of English for International Communication in Listening and Reading comprehension is the most means taken to decide high- stakes subject ([Choi, 2008](#)). The Educational Testing Service (ETS) was developed at first in the United States of America with the form of TOEIC LR (Classic TOEIC) in 1979, as requested by the Ministry of International Trade and Industry Japan ([ETS, 2013](#)). It is designed to assess the comprehension of listening and reading for non- native English speakers in the professional and international business field ([ETS, 2013](#); [Powers & Powers, 2015](#)). It covers the method of administration, time allotment, number of questions, scaled score, and range of difficulty as the necessary features for the test with some revisions ([Norton, 2019](#)). There were some modifications within the format and content by ETS in 2006 to meet with the needs of international language communication in business ([In'nami, 2006](#)). A further revision was also done to be the most recent test format in 2016. It reflects the use of English as the ways for the individual to build general communication in the workplace and social life for any situation around the world every day ([Norton, 2019](#)). The newest format of the TOEIC test is shown in table 1.

**Table 1:** The new design of TOEIC test 2016

Section	Part	Content	Items	Duration	Scores
Listening Comprehension	1	Photographs	6	100	45 mins.
	2	Question- Response	25		
	3	Conversations	39		
	4	Short Talks	30		
Reading Comprehension	5	Incomplete Sentences	30	100	75 mins.
	6	Text Completion	16		
	7	Reading Comprehension Single Passages	29		
		Double Passages	25		
Total	Seven parts		200	120 mins.	990

Nowadays, the fast-growing technology has affected all fields of life, especially in education. The instructional process comes to fruitful teaching by applying varied types of pedagogical strategies through technology. This term was used regarding the comprehensive coverage of technology and second language teaching and learning, with revisions as suggested. It can also be identified as a study of the implementation and exploration of computers in language teaching and learning. It is contrary to what is visible in the traditional classroom, where almost 50% of the high school students to be disconnected and demotivated during the instructional process ([Berk, 2009](#)). Dealing with the condition mentioned

above, the teachers need to combine information and communication technology (ICT) substances in their instructional process to facilitate students in the learning of TOEIC language testing. The terms of ICTs can be varied. The right tool where 90% of students of age below 18 is a mobile device as they have access to mobile technology in fostering education (Valk et al., 2010). Integrating mobile learning as one of the educational technology can be implemented for various matters. It is effectively proven to enhance language skills (Azar & Nasiri, 2014).

The language provides an essential function in ELs' education. In English instruction, mobile technology has been applied to back up the language development covering tablets, personal digital assistants, netbooks, iPod/ iPod touch, and mobile applications in eastern and western backgrounds (Chen, Carger, & Smith, 2017; Billings & Mathison, 2012; Hwang & Chen, 2013; Lin & Wu, 2010; Liu, Navarrete, & Wivagg, 2014). It shows that by applying mobile technology as a media in the instructional process can extend classroom learning, improve students' motivation to learn, support the language content, and engagement. The incorporation of mobile technology with language teaching into classrooms itself is called as mobile-assisted language learning (MALL). As it real benefits through MALL implementation, it becomes the center of attention by more educators and researchers (Kukulksa-Hulme, 2010). It includes some particular features to be explored, consisting of social interactivity, connectivity, context-sensitivity, portability, immediacy, and individuality (Lan, Sung, & Chang, 2007:131). It also supports the interactive learning environment utilizing mobile technology (Huang, Lin, & Cheng, 2008). The strong language appears to support mobile devices for some purposes, such as; auto-correct, spell check, and text entry, which may lead to an open new paradigm in language learning (Godwin-Jones, 2008). As the reasons above, it is highly underlined to identify graduate students of vocational high school perceptions' on the use of technology in terms of mobile learning devices such as; iPad, Personal Digital Assistant, smartphone to assist them in TOEIC language testing mastery. The fundamental purpose of this study is to find out graduate vocational high school students' perceptions of the use of mobile learning in a language test. The essential questions that come in this study are:

- How was the English proficiency of graduate vocational high school students' regarding the result of the TOEIC language test?
- What are the graduate vocational high school students' perceptions of the application of mobile learning to learn TOEIC language test?

## METHODOLOGY

It applied a mixed-method design as the research design in this study. Twenty-five (25) graduate students from two state vocational high schools in Surakarta became the sample of this study. They have different proficiency in English and selected by convenience sampling. The main instruments used here were based on open-ended questions and questionnaires. To gain comprehensive data, the graduate students were asked to answer open-ended questions stated in the questionnaire. They had been viewed and approved by the related experts, a lecturer from the state university, and the supervisors.

## DISCUSSION / ANALYSIS

The results of the research are divided into two parts; respondents' general background and their perceptions on the application of mobile learning into the TOEIC language testing.

### *Respondents' general background*

Twenty-five respondents across central from two different state vocational high schools. They had taken the TOEIC language test in 2018 conducted by the schools where they study in cooperation with the Ministry of Education and Culture along with ETS institution. The results of the study were analyzed by using data frequency. The graduate vocational high school students' English proficiency level on TOEIC language test was at the average level of 76 % were in listening. While reading section reached the average percentage of 32% because of its complexity in the TOEIC language test.

**Table 2:** Respondents' general background

	Classification	Frequency	Percentage
Gender	Male	15	60%
	Female	10	40%
	Total	25	
English language proficiency	Excellent	0	0%
	Good	1	4%
	Average	2	8%
	Fair	2	8%
	Poor	20	80%
	Total	25	

Classification	Frequency	Percentage
The favorite TOEIC test component		
Listening		
Photographs	10	40%
Question- Response	4	24%
Conversations	1	4%
Short Talks	2	8%
Reading		
Incomplete Sentences	3	12%
Text Completion	1	4%
Single passage	2	8%
Double passage	2	8%
Total	25	

### *Graduate vocational high school students' perception of the use of mobile learning*

This part describes the graduate vocational high school students' on the service for the mobile understanding of TOEIC language testing practice. The respondents were asked for five questions, as well as the results. Referring to table 2, it is seen that a total of 89% of the students said to agree about knowing mobile learning. It is in line with the study done by [Valk et al. \(2010\)](#), stating 90% of the students had easy access to the technology on mobile. The students were able to make use of mobile devices as the medium of learning effectively. Based on the research findings, it also showed that 81% of the student had the same and identical point of view about to agree on the relevancy of learning by the assistance of mobile. It also could be used as the medium to replace the use of laptops or computers by the mobile device in learning the TOEIC language test. The finding was also supported by four students commenting:

The implementation of mobile learning on the instructional process is to be relevant from the practicality point of view. It is not limited by space and time as it can be operated through mobile phones, which everyone has access to. Its simplicity seems to be the best part to have on this such learning media.

(Respondent 3)

Mobile learning is simple. No need to bring physical objects which are big in size or dimension and also bulky in weight. All is included in one single application to have all the learning process starting from knowing the topic up to doing the tasks or even the exam. It is just in your hand. I do support the integration of mobile learning on the TOEIC language test.

(Respondent 11)

The use of learning media is essential to help the students' achievement in subjects knew. By using the mobile device included in the part of the instructional process, it will ease us to review and have self- study before, during, and after the lesson. We do not need to take any notes on book writing as they are all available there. I strongly recommend being implemented on TOEIC language test preparation.

(Respondent 15)

In this digital era, where everything mostly runs by the use of technology, the use of mobile learning in the education field must be supported. I think that it will gain more students' interest to learn more because it is not in terms of the textual book, which seems to be not so practical.

(Respondent 19)

**Table 3:** Graduate vocational high school students on the implementation of mobile learning

Statement	Agree and Strongly Agree N (%)	Uncertain N (%)	Disagree and Strongly Disagree
Easiness	23 (92%)	2 (8%)	
Effectiveness	21 (91%)	4 (16%)	
Relevance	18 (72%)	7 (28%)	
Knowledge of mobile learning	25 (100%)		

Despite having the relevance on the application of mobile learning, 92% of the respondents stated that integration of technology on the learning process improving the easiness of the TOEIC language test. They tend to have enough information on how it will work as being familiar with the use of a mobile phone. In brief, it can be inferred that most of the graduate vocational high school students had a positive perspective on mobile learning. It is line with [Azar and Nasiri \(2014\)](#) underlining that it can lead to increase students' performance on foreign language learning.

*The integration of mobile learning*

The integration of the mobile device into the TOEIC language learning can be utilized as an effective medium to achieve the target of accomplishment. The results can be described below.

**Table 4:** The integration of mobile learning

Statements	Agree and Strongly Agree N (%)	Uncertain N (%)	Disagree and Strongly Disagree N (%)
Contributing to self - study	20 (80%)	5 (20%)	
Listening skill development	22 (88%)	3 (12%)	
Reading skill development	24 (96%)	1 (4%)	
Creating fun learning	23 (92%)		2 (8%)

From the table, as shown above, it can be described that most of the graduate vocational high school students (96%) were in the same perception about to agree on using mobile devices to assist their English language mastery. The use of technology in language learning is widely spread, especially by mobile devices giving chances for them to have better and meaningful understanding. These results were declared by three of respondents commenting:

By using mobile learning, I have access to get several information related to the topic of discussion easily. From searching and downloading are done without any obstacles. It is so easy. Interesting!

(Respondent 5)

I often find difficulties in the listening section. I cannot get the topic of discussion and its expression on short talk or conversation. By using mobile learning, I have the chance to learn and play the recording over and over again quickly with a single click on my smartphone. It is so helpful.

(Respondent 16)

With the assistance of mobile learning, I can practice more on reading skills with some techniques like skimming and scanning. The feature is possible for us to make a highlight for general and detailed information.

(Respondent 20)

From the table, it can also be inferred that they mostly agree (80%) that the use of mobile learning produces a self- study and fun condition to enhance TOEIC language learning. Mobile devices are designed to build an enjoyable understanding with many useful applications (Zhang, 2015). There are 92 % of students projecting that mobile learning supports them in creating conducive learning for the TOEIC language test.

## CONCLUSION

The results obtained from this research come in line with the previous studies on the use of mobile learning. It comes to the relevance between the students' perception of mobile learning and academic achievement (Valk et al., 2010). The discussion related to the integration of mobile knowledge to the instructional process also in agreement with the studies conducted by Hlodan (2010) and Zhang (2015). In general, the graduate vocational high school students gave a positive perspective on learning TOEIC language tests facilitated by mobile learning assistance. The data are taken from the survey, and open-ended questions showed that they also had good information background about mobile learning and its usage. Thus, giving clear evidence that it plays a significant role for them to prepare the TOEIC language test.

## LIMITATION AND STUDY FORWARD

It is recommended for future related research dealing with the implementation of technology to facilitate students to have more self-regulated learning as some problems occurred in the class during the instructional process. The future study should expand it more; not only producing its mobile learning technology but also develops further on other English proficiency tests such as; IELTS or TOEFL, including the different levels of education. It will bring more opportunities for any level of knowledge and their students with a varied offer of mobile language learning assistance.

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## AUTHORS CONTRIBUTION

This paper comes to the final manuscript through the process and real contributions among the authors covering; the first author in setting the conceptual framework and initial field study for the paper outline, the second author in designing the research method and literature review supplies, the third author in data presentation and analysis, and the fourth author in having final overall revision for the content and data description.



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